

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

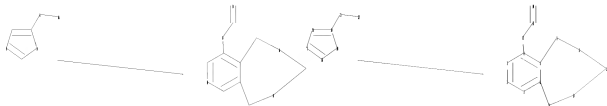
LOGINID:SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	3	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	4	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	5	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	6	JUN 25	CA/CAPLUS and USPAT databases updated with IPC reclassification data
NEWS	7	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS	8	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS	9	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS	10	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS	11	JUL 28	CA/CAPLUS patent coverage enhanced
NEWS	12	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
NEWS	13	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS	14	JUL 28	STN Viewer performance improved
NEWS	15	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS	16	AUG 13	CA/CAPLUS enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS	17	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS	18	AUG 15	CAPLUS currency for Korean patents enhanced
NEWS	19	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS	20	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS	21	SEP 25	CA/CAPLUS current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS	22	SEP 26	WPIDS, WPINDEX, and WPIX coverage of Chinese and Korean patents enhanced
NEWS	23	SEP 29	IFICLS enhanced with new super search field
NEWS	24	SEP 29	EMBASE and EMBAL enhanced with new search and display fields
NEWS	25	SEP 30	CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents
NEWS	26	OCT 07	EPFULL enhanced with full implementation of EPC2000
NEWS	27	OCT 07	Multiple databases enhanced for more flexible patent number searching



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chain nodes :
12 13 14 21 22
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 16 17 18 19 20
chain bonds :
4-12 12-13 13-14 19-21 21-22
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-11 9-10 10-11 16-17 16-20 17-18
18-19 19-20
exact/norm bonds :
4-12 12-13 13-14 16-17 17-18 19-21 21-22
exact bonds :
5-7 6-9 7-8 8-11 9-10 10-11 16-20 18-19 19-20
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 : 16 :

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:CLASS 14:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom
21:CLASS 22:CLASS
fragments assigned product role:
containing 1
fragments assigned reactant/reagent role:
containing 16

```

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 12:14:20 FILE 'CASREACT'
SCREENING COMPLETE - 3 REACTIONS TO VERIFY FROM 1 DOCUMENTS
100.0% DONE 3 VERIFIED 2 HIT RXNS 1 DOCS
SEARCH TIME: 00.00.01
L2 1 SEA SSS FUL L1 (2 REACTIONS)
=> d ibib abs fhit tot

ACCESSION NUMBER: 143:7535 CASREACT
 TITLE: Manufacture of vitamin B6 and related
 9-acyloxy-1,5-dihydro-8-methylpyrido[3,4-
 e][1,3]dioxepins
 INVENTOR(S): Fischesser, Jocelyn; Fritsch, Helmut; Gum, Andrew
 George; Karge, Reinhard; Keuper, Ralf
 PATENT ASSIGNEE(S): DSM IP Assets B. V., Neth.
 SOURCE: PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

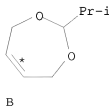
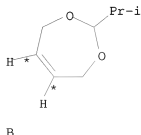
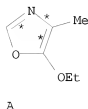
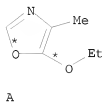
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005049618	A1	20050602	WO 2004-EP12655	20041109
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1685133	A1	20060802	EP 2004-818764	20041109
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
CN 1882592	A	20061220	CN 2004-80034214	20041109
JP 2007511558	T	20070510	JP 2006-540247	20041109
US 20070072254	A1	20070329	US 2006-579836	20060608
PRIORITY APPLN. INFO.:			DE 2003-10353999	20031119
			WO 2004-EP12655	20041109
OTHER SOURCE(S):	MARPAT 143:7535			
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

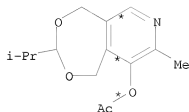
AB A process for manufacturing a 3-un-, 3-mono- or 3,3-disubstituted 9-acyloxy-1,5-dihydro-8-methylpyrido[3,4-e][1,3]dioxepin I [R2, R3 = H, C1-4-alkyl C2-4-alkenyl; R4 = C1-4-alkyl, C1-4-haloalkyl, Ph-(C1-4-alkyl), Ph; CR2R3 = C4-6-cycloalkylidene] and optionally for manufacturing pyridoxine involves performing an addition reaction between a 4-methyl-5-alkoxy-oxazole II [R1 = C1-4-alkyl] and a 2-un-, 2-mono- or 2,2-disubstituted 4,7-dihydro-1,3-dioxepin III in the substantial absence of a solvent and a catalyst to give a product mixture consisting essentially of the appropriate Diels-Alder adduct IV in a major proportion and the appropriate 3-un-, 3-mono- or 3,3-disubstituted 1,5-dihydro-8-methylpyrido[3,4-e][1,3]dioxepin-9-ol V in a minor proportion, removal of a substantial proportion of the unreacted oxazole and dioxepin starting materials from the product mixture by distillation under reduced pressure, addition of a substantially anhydrous organic acid to said product mixture and rearrangement of the Diels-Alder adduct IV to further V in the presence of said substantially anhydrous organic acid with removal of the generated alkanol by

distillation under reduced pressure, and acylation of the resultingly enriched quantity of V with an added carboxylic acid anhydride, (R4CO)2O to produce the desired I, and optionally converting this so-manufactured acylation product I to pyridoxine by acid hydrolysis for achieving deprotection and deacylation. Pyridoxine [VI] is a well known form of vitamin B6 with well established utility.

RX(5) OF 7 COMPOSED OF RX(1), RX(3)
 RX(5) 2 A + 2 B + F ==> G



2
 STEPS
 →



YIELD 98%

RX(1) RCT A 5006-20-2, B 5417-35-6
 PRO C 5205-63-0, D 1622-67-9
 CON 4 hours, 155 deg C
 NTE neat; monitored by GC

RX(3) RCT D 1622-67-9

STAGE(1)
 CON 80 deg C, 1 atm

STAGE(2)
 RCT F 108-24-7
 CON SUBSTAGE(1) 5 minutes
 SUBSTAGE(2) 1 hour
 SUBSTAGE(3) 200 - 20 mbar

STAGE(3)
 SOL 25322-68-3 HOCH2CH2OH polymer
 CON SUBSTAGE(1) 120 deg C, 0.1 - 0.01 mbar
 SUBSTAGE(2) 80 - 145 deg C, 0.1 - 0.01 mbar

PRO G 92671-67-5
 NTE neat; monitored by GC; distn. last part second stage and all third stage

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

123.02

123.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-0.75

-0.75

STN INTERNATIONAL LOGOFF AT 12:14:47 ON 07 OCT 2008